Financialization of the Real Estate Market in Spain

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Abstract. The process of financialization of the economy greatly affects the real estate sector, a sector that represents two-thirds of the planet's total capital and which is highly attractive to investors at the same time as low risk. The transfer of real estate assets to companies that base their business on leasing models is led by the tax figure of Real Estate Investment Trusts (REITs). This work analyzes its impact in Spain from its initial regulation in 2009, studying its financial results from the points of view of the volatility of the sector and the generation of results. It highlights, on the one hand, the importance of the revaluation of the assets themselves and their accounting in the results and, on the other, the increase in market volatility under a high level of liquidity and a modification of the leverage criteria. The results show how the objectives of public policies of increasing liquidity and energizing the market present another side of the coin, effects of attracting capital and generating uncertainty in the sector, results opposite to the objectives of facilitating access to the home.

Keywords: financialization · volatility · sustainable development · economic valuation

1 Introduction

The financialization process includes aspects such as the increase in the role of financial markets in the economy [1, 2], the generation of profits through financial channels [3], or the mastery of the financial logic of shareholder value [4, 5]. It is a concept usually worked together with those of Neoliberalism and Globalization [6], in which a combination can be seen that includes a tendency for markets to globalize by reducing the barriers and differences between them [7], favored by a 'neoliberal' logic of investment profitability [5] in markets of increasing dimensions and under the growth of finance as a means and end of said profitability. Three concepts that, although they are presented together under the criticism of the economic model, are also presented as a result of a market highly intervened by the public sector of different countries with the capacity to modify investment conditions with the objective of attracting capital to their economies. National, generating new balances of profitability and risk in a way in which fiscal policy decisions become a necessary ally of the model considered neoliberal.

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In the process of financialization, the role of the real estate sector stands out, a sector that at the international level represents two thirds of the total capital existing in the sum of the value of land plus the value of buildings. Thus, the process of financialization plays an important role in the real estate sector by making the most rigid assets of the economy liquid, associated with long periods of exchange, price uncertainty, high transaction costs and the participation of numerous intermediaries. Through the acquisition of properties in the hands of companies it is possible to distribute their ownership in small participations that have the opposite characteristics to the traditional real estate sector, thus becoming liquid assets in which investment is easier, exchange times can be reduced to a minimum, quoted prices are used that value the asset in real time, and transaction costs and intermediation are reduced to a minimum.

Traditional real estate models based mostly on build-to-sell or buy-to-sell [8] are facing a growth of rental-driven models, in the form of build to rent or buy to rent, in which corporate profit reduces its focus from speculative purposes to real market purposes under the lease of space. The increase of real estate assets directed towards leasing is embodied as a form of financialization 2.0 [9] in which the stability of rents under growth conditions is combined together with the expected effects of real estate appreciation. These models are based on the transfer of assets from natural persons to legal entities with the aim of increasing their profitability [10, 11] due to both the possibilities of transfer and the tax burdens associated with each type of legal entity. This is a progressive transfer of assets in which those that present a greater profitability differential are progressively incorporated [12]. This process of asset transmission is based both on a socialization of the investment through small participations, either in the form of business shares as well as intermediate proposals for the tokenization of assets and the participation of smart contracts with the capacity to automatically distribute the assets. Rents obtained from leases [13].

Along with these types of investment there are other figures in which the legal personality plays an important role. Another type of investment in the construction of buildings consists of the company making the expense to build (for example: the building of the headquarters, and then renting it to the company, to recover the investment as if it were a life annuity. It is similar to what is called reverse mortgages, whereby a highly valuable asset can be converted into a constant income over time. An example of this can be seen in the case of the Santander group's City, its banking headquarters near Madrid, came into operation in 2004. The investment was valued at $3 billion and was expected to produce income of $100 million each year. But the property has been greedy and has gone through different financial companies, which demonstrates the interest of real estate assets as a future income [14]. Another aspect to highlight is that due to the cyclical nature of the economy, and the interest in buildable tourist land, When, in Spain, the economy is in decline, European citizens compensate for the lack of demand from Spain with an added demand from non-Spanish citizens [15].

The financialization process of the real estate sector poses a significant effect on market volatility [16]. This situation presents higher volatility levels than the traditional real estate market, while lower than those that can be found in other sectors [17]. With respect to the sources of financing, the change in the level of market leverage stands out [18].

Real Estate Investment Trusts (REITs) emerged in 1961 in the United States as a business form dedicated to the leasing of real estate assets under specific criteria regarding the participation in the company, the investments to be made or the distribution of dividends. This type of company has grown significantly over the last three decades, both in terms of specific regulations in different countries around the world and in terms of the number of companies and the value of investments made. The first decade of the 20th century was the main period in the internationalization of this type of taxation with the creation of regulations in countries such as Japan, France, Germany, Italy, the United Kingdom, and Spain. In contrast to this generalized growth, the conditions in each country differ, which has led to very different levels of implementation. The United States maintains a significant level of investment in this type of company, which is more than 10 times the capitalization of Japan as the second country with the second largest application of the model. This regulatory process has had an international impact on the growth of the number of REITs to over 900 in 2023, distributed among number of REITs to exceed 900 in 2023, distributed among the Americas (36%), Europe (29%), Asia (27%), Oceania (4%) and Africa (3%). (29%), Asia (27%), Oceania (4%) and Africa (3%). The conditions described have led to the capitalization of REITs accounting for 1.35% of U.S. GDP in 2000, 2.59% in 2010 and 5.93% in 2010.

The investment in REITs is highly diversified at the sectoral level; in the case of the United States, the main sectors according to capitalization are residential, followed by retail, infrastructure, industrial and data centers, all of which individually account for between 15% and 10% of the total capitalization of REITs. Although all sectors are related in aspects such as land value or access to credit, they may also have differences and particular uses that are legally delimited. Of all of them, the most controversial among the different policies is the residential sector, which is also the most capitalized. REITs offer an equity investment model with a reduced level of risk compared to other sectors. They allow generating long-term returns with a high level of guarantee. On the other hand, they pose a high dependence on the markets, with a special emphasis on residential rentals given their conceptualization as a home for citizens. This implies accepting the possibility of substantial changes in the rents to be paid as well as non-renewal of the lease contract.

In the case of Spain, the real estate sector is the main source of savings for a large majority of society, which traditionally owns its own home. Only in the highest income and wealth percentiles are investments in financial assets to a greater extent than in real estate [19]. It is in this context that the regulation of REITs in Spain by Law 11/2009 with the objective of "searching for constant improvements in the well-being of citizens" to "provide liquidity to real estate investments", aspects for which a tax regime is developed with special tax conditions in Law 16/2012 that allow obtaining higher returns on real estate investment with respect to those generated through other corporate forms. Its regulation continues in 2018 and 2021 with modifications aimed mainly at income generated by non-residents and profits not distributed by REITs respectively.

This document analyzes the role of REITS in Spain, studies the generation of profits of this type of companies as well as the relationship between the rigidity of real estate prices that represent the largest proportion of their assets, and the volatility associated with business actions. The document begins with the present introduction and continues

in the second point with the methodology followed. The Sect. 3 collects the results obtained, the Sect. 4 shows the discussion of the results and finally the Sect. 5 is dedicated to the conclusions.

2 Methodology

This study is based on the compilation of financial data from the different REITs in Spain, locally called "Real Estate Investment Companies" and known locally as (SOCIMI). These are companies that, due to their tax status, are required to be listed on the stock market. At the Spanish level, these are listed on different markets such as the Ibex35, the Continuous Market, the Euronext Access or the BME Growth. The largest ones can be located in the Ibex 35 index (Merlín Capital SOCIMI (Merlín) and Inmobiliaria Colonial SOCIMI (Colonial)) that includes the highly negotiated companies at the national level, while the vast majority can be found in BME Growth associated with significantly lower negotiation conditions. For the compilation, the audited financial reports of the different companies in their stock indices have been accessed based on information from Spanish Stock Exchanges and Markets as well as the National Stock Market Commission. In Table 1 the main companies are highlighted together with their capitalization level and their share price at the end of the years 2019 to 2022, as well as the main sector in which their business is located (Fig. 1).

MAIN SOURCES	MAIN DOCUMENTS	MAIN DATA
IBEX35	FINANCIAL REPORTS	INCOME
CONTINOUS MARKET	STOCK EXCHANGES	REAL ESTATE INVESTMENTS VALUE
EURONEXT ACCESS	NATIONAL STOCK MARKET COMMISSION	ASSETS
BME GROWTH		STOCK PRICES

Fig. 1. Summary table of the sources of information used in the preparation of the study as well as the main documents extracted from these sources and the main data analyzed. Source: own elaboration.

In order to carry out the analysis, the balance sheets and income statements of these companies have been accessed, from which the most representative values have been taken. On the balance sheet side, the most representative values were those related to the value of real estate investments, their reported changes over the years, the total composition of their assets, the distribution of their liabilities and shareholders' equity. In the case of the income statement, the income generated, and the different profit levels of the companies have been used.

Table. 1. List of the main REITs in Spain ordered according to their capitalization in 2022. It includes their name, Tickr, capitalization according to closing balances between 2019–2022, 2019–2022 share price collected by Yahoo Finance and the company's main business sector. Source: Own elaboration based on data from the Spanish stock market as included in [20].

REIT	Tickr	Cap 2019	Cap 2020	Cap 2021	Cap 2022	Cot 2019	Cot 2020	Cot 2021	Cot 2022	Main Sector
MERLIN	MRL.MC	6.008	3.654	4.495	4,122	12,79	7,78	9,57	8,77	Offices
COLONIAL	COL.MC	5.772	4.077	4.452	3,243	11,36	8,02	8,25	6,01	Offices
GMP	YGMP	1.090	1.090	1.080	1,070	57,00	57,00	56,00	56,00	Several
VIVENIO	YVIV	503	706	837	947	1,15	1,14	1,35	1,35	Residential
ZAMBAL	YZBL	794	781	762	729	1,23	1,21	1,18	1,13	Offices
TESTA	YTST	846	839	833	714	6,40	6,35	6,30	5,40	Residential
CASTELLANA	YCPS	603	474	590	646	7,00	5,50	6,85	6,55	Commercial
SILICIUS	YSIL	–	–	613	436	–	–	17,00	14,10	Several
EMPERADOR	YEPSA	–	–	–	428	–	–	–	4,20	Offices
FIDERE	YFID	145	141	136	409	14,40	14,00	13,50	40,60	Residential
MILLENIUM	YMHRE	270	245	298	387	5,40	4,50	3,88	3,34	Hospitality
LAR ESPAÑA	LRE.MC	643	409	428	353	7,10	4,67	5,12	4,22	Commercial
ATOM	YATO	355	322	305	322	11	10	9	10	Hospitality
ALBIRANA	YAPS	324	324	270	270	33,60	33,60	28,00	28,00	Residential
TRIVIUM	YTRI	249	247	235	231	5,00	5,00	5,00	5,41	Commercial
ARIMA	ARM.MC	321	235	260	213	11,30	8,30	9,18	7,50	Offices
OLIMPO	YORE	194	200	208	206	0,99	1,02	1,06	1,05	Commercial
IBERVALLES	YIBV	–	–	–	148	–	–	–	5.55	Offices

Given the large number of REITs in the Spanish market, a selection has been made to show their results in the following pages according to those shown in Table 2. This selection has been based on the most representative companies in terms of their size, the markets in which they are listed and, finally, their involvement in the residential sector.

3 Results

The results show the continued growth of REITs in Spain from 2012 until 2020, when growth slows down due to the pandemic. The high share in the REITs portfolio of investments in sectors such as offices, shopping centers or logistics spaces shows a substantial change in returns from the pandemic onwards. Three years follow between 2021 and 2023 in which capitalization has remained relatively stable above 20 billion euros, with a growth in proposals aimed at the residential sector to the detriment of profitability and investment in other sectors, among which the office sector stands out.

In the first place, the high share of real estate investments in the balance sheet of the companies can be observed, as indicated by the regulation, this type of assets represents

Table. 2. List of the main REITs mentioned in the results, including their abbreviation and the market in which they are listed. Source: own elaboration.

Name		Stock Market
Merlin Properties SOCIMI, S.A	(Merlín)	IBEX35
Inmobiliaria Colonial SOCIMI, S.A	(Colonial)	IBEX35
Lar España Real Estate SOCIMI, S.A	(Lar)	M.CON
Árima Real Estate SOCIMI, S.A	(Arima)	M.CON
Gmp Property SOCIMI, S.A	(GMP)	BME.G
Vivenio Residencial SOCIMI, S.A	(Vivenio)	BME.G
Testa Home, S.L	(Fidere)	BME.G
Testa Home, S.L	(Testa)	BME.G
All Iron RE I SOCIMI, S.A	(All Iron)	BME.G

an amount of over 80%. Spanish REITs have been obtaining rental income in a range between 2% and 5% with respect to available real estate assets. The differences are mainly due to the profitability of the sectors in which they invest, being higher for offices or logistics centers than for real estate. There are also variations in terms of time. In addition to this type of income, there is the impact of the recording in the income statement of the professional estimate of the variation in the value of real estate investments, which is recorded as income or loss for the year, and which, in the case of REITs, has an effect similar to that obtained by the income from the leasing business.

Figure 2 shows the relationship between the income derived from leasing the real estate spaces owned by the respective REITS divided by the change in the fair value of the real estate assets. Both data reported according to the income statement of the companies analyzed. It can be seen that for all years except for 2020 (the year in which the Covid19 pandemic began), the variation in the value of assets computes an average of 0.78 of the income generated during the year, with 2016 representing the lowest average value with 0.59, and 2021 the highest with 1.13, representing the year in which the distorting effects of the pandemic are carried forward. In the case of 2020, the average figure of -2.48 implies a high correction in the value of assets combined with a reduction in income generated in the period. At an individual level, the behavior of Merlín stands out, whose assets grow on average by 0.92 between the years 2014 and 2019, which implies an impact on the profit of the period almost equivalent to that of the income generated by the leases. On the opposite side, the role of Colonial can be seen, with an average revaluation impact of 0.44 for the same period, an aspect that continues to mean that close to half of the operating profit recorded in the income statement is not due to the normal income of the business.

For the cases of Merlin, Colonial or GMP, in the five-year price growth period between 2015 and 2019 the growth in asset value remained higher than the revenues received during all years, except for 2019 for Merlin and 2017 for GMP. Similar situation to Lar between 2016 and 2017 or Arima between 2018 and 2021. In the case of the

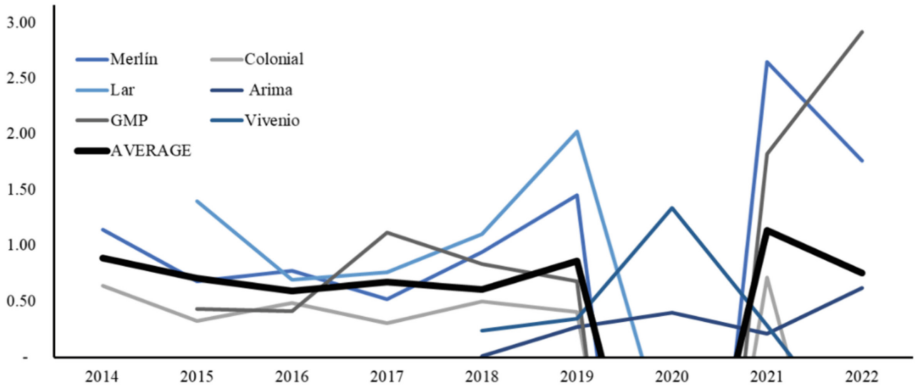

Fig. 2. Evolution of the ratio of income from leasing business divided by the change in value of real estate investments, according to the annual income statement. Source: own elaboration based on the annual results of selected companies.

residential sector, the role of companies such as Testa, Fidere and Vivenio stands out. The first two are owned by Blackstone through its own investment funds. For Testa, leasing revenues remained lower than those accounted for by the change in assets during the years 2017 to 2019, while for Vivenio a different behavior is observed in which leasing revenues prevail, with the exception of 2019 when the change in value of assets goes from having moved in the 0–2% environment to exceed 10% annual change. Lastly, Vivenio proposes a behavior similar to that shown for Merlin, Colonial or GMP, with sustained growth before the pandemic and a significant correction in 2020.

Table. 3. Evolution of the ratio of income from leasing business divided by the change in value of real estate investments, according to the annual income statement. Source: own elaboration based on the annual results of selected companies.

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Merlín	1.14	0.68	0.77	0.52	0.94	1.45	−5.31	2.64	1.76
Colonial	0.64	0.32	0.48	0.30	0.50	0.41	−4.32	0.71	−2.46
Lar		1.40	0.69	0.76	1.10	2.03	−0.93		2.50
Arima					0.01	0.27	0.40	0.21	0.62
GMP		0.43	0.41	1.11	0.83	0.68	−6.06	1.82	2.91
Vivenio					0.23	0.34	1.34	0.28	−0.82
AVERAGE	0.89	0.71	0.59	0.67	0.60	0.86	−2.48	1.13	0.75

It can thus be observed that the recognition of income from change in the value of assets does not appear as an exceptional situation, but as a norm in the results of these companies, as can be seen in Table 3. The inclusion of the variation in the price of real estate assets in the balance sheet of companies has both advantages and disadvantages.

From the point of view of the true and fair view of the accounts, it can be understood as a necessary mechanism to have the truest possible representation of the value of these assets on the balance sheet. However, it becomes at the same time the use of an estimate that poses risks of the estimate itself, at the same time as the risks associated with a distribution of profits on which there has been no liquid income for the company and can generate greater cash flow problems as the revaluation of the assets increases and therefore the dividends that these companies are obliged to pay out are greater.

Figure 3 shows the price value of the selected REITs based on a unit value for July 2, 2021. The existence of different behaviors is observed, on the one hand REITs such as Merlín, Colonial, Lar or Arima, shows high volatility, with growth of more than 40% in one year as for the Lar group in 2023. On the contrary, in the case of colonial there is a decrease of 34% in four months between May 30 and 27 September 2022. All Iron and Testa show the opposite behavior, whose prices remains practically unchanged between October 2022 and March 2024. These results show low trading on the stock market. The results of Adriano, All Iron or Testa serve as an example of the performance of shares listed on BME Growth, a market in which trading volumes are low compared to the shares of larger companies.

The behavior of REIT investment contrasts with that of the real estate market. In contrast to the changes of more than 10% that are observed in the price of shares in a matter of weeks or months, the price of housing has shown lower but continuous growth rates over the last decade, with very limited corrections in value, both in terms of the number of events and their amplitude. Between 2015 and 2023 the maximum price growth at the Spanish level has occurred in the Community of Madrid with 63%, while the average growth among the 17 Spanish regions has been 47%.

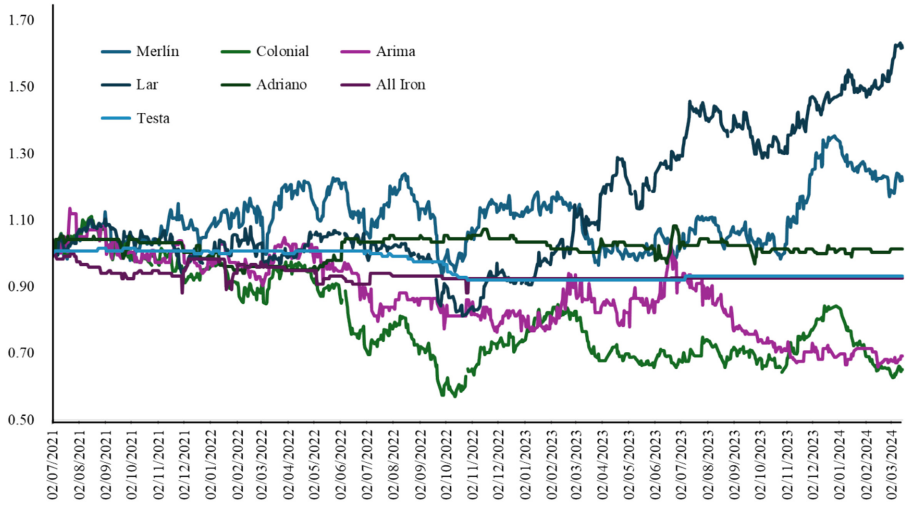

Fig. 3. Evolution of the prices of seven Spanish REITs from July 2, 2021, to March 15, 2024. Source: own elaboration based on Yahoo Finance data.

The analysis shows how REITs are an attractive investment option compared to other forms of investment due to their preferential tax treatment. By providing particular conditions, the market equilibrium is modified, altering the decision criteria in areas such as real estate development, housing supply, or the refurbishment of existing properties. The modification of tax conditions acts as a tool for market innovation from the tax point of view, generating higher returns without any improvement in the supply of the company's products and services.

4 Discussion

The results show the behavior of REITs as a modifying agent of the current market equilibrium, favoring the attraction of capital through an increase in liquidity, the possibility of periodically benefiting from the effects of asset revaluation or the ability to improve the operating conditions of real estate compared to other traditional forms of tenure.

Only four of the companies analyzed show continuous changes in the value of their share, an aspect that questions the expected effect of providing liquidity to the sector that is included in the preamble of the Law of initial regulation of REITs in Spain. On the contrary, most of these companies have a high stability in value as a result of their low trading in the stock markets. In this way, only companies listed on the IBEX35 or on the Spanish "continuous market" show continuous trading of their securities, while most of those listed on BME Growth show low or very low levels of trading at the same time as a large continuity in the value of its contribution.

The results also show the volatility in the value of the REITs analyzed. It is observed that there is a significant change in the valuation of companies whose assets are based on real estate for more than 80%. This situation faces the relative price stability of the real estate market, in which small percentage variations in prices can be considered highly significant. This condition implies applying to the real estate market the benefits and risks of business investment under forms of acquisition or purchase for lease, modifying under specific legal conditions behaviors such as capital attraction, financing sources or the profitability of the sector.

Reason helps update asset values based on market conditions, providing a more accurate picture of current conditions on a company's balance sheet. At the same time, there are other reasons to realize a capital gain by selling an asset, in which case it reflects a combination of facts rather than market expectations. The contradiction between these two concepts does not prevent us from considering that the non-consolidated financial profitability presented by the analyzed companies significantly affects market activity and the relationship between profitability and investment risk. The conversion of real estate assets into liquid assets in the stock market also affects market profitability, as their valuation becomes dependent on corporate standards. As a result, volatility has increased significantly due to increased dependence on changes in company reported results and macroeconomic factors. Interest rates have a direct impact on corporate behavior and greatly increase the speed with which they affect markets, displacing the delays caused by the extension of long-term credit and the formal buying and selling of assets. The public sector seems to be a key player in this process, as it is able to change the terms of real estate profitability according to the wishes of the owners. This ability leads to a

current equilibrium situation that is subject to uncertainty arising from the regulation of the asset stock or the possibility of changing its rate of active incorporation. Considering that four specific SOCIMI regulations were adopted in less than 15 years and the real estate market has specific regulations, it becomes difficult to predict the profitability of the industry.

In terms of financing sources, the change in the role of debt stands out. The companies in the sector have a debt level in Spain of less than 50%, with ratios that are between 35 and 50% for the majority of cases and years of the REITS analyzed. Element that poses different criteria compared to traditional real estate credit, in which acquisitions are mostly considered on a unitary basis and there is a tendency to accept a level of debt at the time of purchase of 80% of the value of the property. The transfer of numerous properties to companies thus causes a socialization of the risk between the properties invested from the point of view of the asset while leading to a modification of the sources of financing in terms of business leverage.

The consideration of legal workers is expected to increase in the current economy. There are two basic elements such as the choice of current liquidity conditions and fiscal policy. In terms of liquidity, it is worth noting the fact mentioned in this document that illiquid assets such as real estate can be converted into other liquid assets such as company shares or tokens. In that sense, the process of economic development in the real estate sector can increase liquidity in these properties, so it is expected that the market will contribute to the increase in liquidity with appropriate tax conditions. In the second case, the difference in tax policy is that the costs associated with these two properties are related to the cost of ownership of the property, but they are different between the different legal personality that creates differentiated returns based on asset ownership criteria.

In addition, the role of regulatory objectives can be viewed from the perspective of maximum use of material resources, followed by general conditions of use under current conditions in business-based development models, such as land leases, and vice versa, in the absence of others. Business, fashion, leasing rights for related economic activity. Another issue also has macroeconomic implications, as geographic development increases national GDP in the form of rents, while ownership of the aforementioned assets contributes less to the national accounts, mainly in the form of maintenance and supply. According to the above reasoning, increasing efficiency through the influence of legal entities should reduce prices according to the maximum use of premises, thereby improving people's welfare.

The current situation of real estate wealth shows a growing trend in the impact of the real estate sector on global wealth. In the 1950s, total wealth represented 2.5 times that of the real estate sector, an amount that has been reduced in the second decade of the 21st century to a value of 1.7 [21]. This variation may increase under market conditions that favor real estate investment over other options.

5 Conclusions

The process of financialization of the real estate market has a fundamental element in the transmission of assets from individuals to companies. Companies, more focused on the leasing of real estate that allows the generation of value for the shareholder, become

an investment tool that allows reducing the amount of investment in the real estate sector under the stability of the sales associated with the leases. This situation, which on the one hand poses benefits such as a considerable increase in liquidity, with reduced investment times, the ability to diversify investments, professionalization, or reduction of intermediaries, at the same time poses impacts with opposite effects, among which the increase in the volatility of the real estate market.

The regulation of REITs as real estate investment instruments that allow special tax conditions modifies the balance of the market by favoring leasing models over traditional ownership, while promoting the attraction of capital thanks to a combination of liquidity, stability and low taxation of a market that is traditionally associated with opposite conditions in terms of liquidity and public intervention. Under this criterion, the result of the specific regulation of the sector in Spain in the form of attracting capital for real estate investment can help to offer dynamism to the sector, but on the other side of the coin it facilitates the attraction of capital and the increase of the value of real estate, results that can be considered contrary to the generally announced housing protection policies that are included in the constitution. This shows the two sides of the coin described by Hazlitt [22], under his conceptual application, intervention in the real estate sector for the positive purposes of generating liquidity and dynamism has effects that are difficult to control in the market in the form of varying incentives for real estate investment, affecting the general structure of the market and its relative attractiveness with respect to other investment options. The main result is an increase in the availability of real estate for rent without necessarily leading to a reduction in prices or greater accessibility for the population.

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References

1. Epstein, G.A.: Financialization and the World Economy. Edward Elgar (2005)
2. Aalbers, M.B.: The financialization of home and the mortgage market crisis. Competition Change **12**(2), 148–166 (2008)
3. Krippner, G.R.: The financialization of the American economy. Socio Econ. Rev. **3**, 173–208 (2005)
4. Mader, P., Mertens, D., Van der Zwan, N.: Financialization: An Introduction. The Routledge International Handbook of Financialization. Routledge, London (2020)
5. Erturk, I.: Shareholder Primacy and Corporate Financialization. The Routledge International Handbook of Financialization. Routledge, London (2020)
6. Aalbers, M.B., Christophers, B.: Centring housing in political economy. Housing Theory Soc. **31**(4), 373–394 (2014). https://doi.org/10.1080/14036096.2014.947082
7. Sawyer, M.: Financialization, Economic and Social Impacts. Agenda Publishing (2022)
8. Aalbers, M.B.: The Financialization of Housing. A Political Economy Approach. Routledge, London (2016)
9. Wijburg, G., Aalbers, M.B., Heeg, S.: The financialisation of rental housing 2.0: releasing housing into the privatised mainstream of capital accumulation (2018). https://doi.org/10.1111/anti.12382

10. Charles, S.L.: The financialization of single-family rental housing: an examination of real estate investment trusts' ownership of single-family houses in the Atlanta metropolitan area. J. Urban Affairs **42**, 1321–1341 (2019). https://doi.org/10.1080/07352166.2019.1662728
11. García-Lamarca, M.: Real estate crisis resolution regimes and residential REITs: emerging socio-spatial impacts in Barcelona. Housing Stud. 36, 1407–1426 (2020). https://doi.org/10.1080/02673037.2020.1769034
12. Méndez Gutiérrez del Valle, R.: Financiarización urbana y burbuja del alquiler en España: tendencias y contrastes en perspectiva multiescalar. Documents d'Anàlisi Geogràfica **67**(3), 441–463 (2021)
13. Sazandrishvili, G.: Asset tokenization in plain English. J. Corp. Acc. Fin. **31**, 68–73 (2020). https://doi.org/10.1002/jcaf.22432
14. Atance del Olmo, D., Debón, A., de la Fuente, M.I.: Valuation of reverse mortgages in the Spanish market for Foreign residents. Technol. Econ. Dev. Econ. **30**(1), 1–28 (2023). https://doi.org/10.3846/tede.2023.20159
15. Ibáñez de Aldecoa Fuster, J., Montoriol Garriga, J.: The strength of Foreign demand for housing in Spain and its long-term outlook. Caixa Research (2022)
16. Chung, R., Fung, S., Shilling, J.D., Simmons-Mosley, T.X.: REIT stock market volatility and expected returns. Real Estate Econ. **44**, 1–28 (2016). https://doi.org/10.1111/15406229.12128
17. Delisle, R.J., McKay Price, S., Sirmans, C.F.: Pricing of volatility risk in REITs. J. Real Estate Res. **35**(2), 223–248 (2013). https://doi.org/10.1080/10835547.2013.12091359
18. Chacon, R.G.: Tenant concentration in REITs. J. Real Estate Finance Econ. **66**, 636–679 (2023). https://doi.org/10.1007/s11146-021-09829-1
19. Martínez Raya, A., Segura de la Cal, A., Rodríguez Oromendía, A.: Financialization of real estate assets: a comprehensive approach to investment portfolios through a gender-based study. Buildings, **13**(10), 2487 (2023). https://doi.org/10.3390/buildings13102487
20. Segura de la Cal, A.: Análisis del Proceso de Capitalización del Sector Inmobiliario Español. Tesis (Doctoral), E.T.S. de Edificación (UPM) (2024). https://doi.org/10.20868/UPM.thesis.81421
21. Aalbers, M.B., Fernandez, R., Wijburg, G.: The Financialization of Real Estate. The Routledge International Handbook of Financialization (2020)
22. Hazlitt, H.: La economía en una lección. Students for Liberty (1946)